

## Frickley Colliery

Archaeological Salvage Record

for  
Renaissance South Yorkshire

January 2008

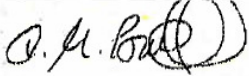
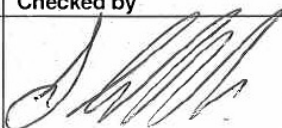
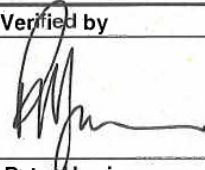


# Frickley Colliery

## Archaeological Salvage Record

for  
Renaissance South Yorkshire

January 2008

Frickley Colliery Archaeological Salvage Record for Renaissance South Yorkshire				
Issue		Prepared by	Checked by	Verified by
V1	October 2007			
V2	-			
V3	-			
V4	-	Caroline Dempsey	Guy Kendall	Peter Harrison
V5	-	Archaeologist	Principal Archaeologist	Associate Director
N:\Projects\E8501-E9000\E008538-1\reports\Frickley Salvage Record Report				
White Young Green Environmental Limited, Arndale Court, Headingley, Leeds. LS6 2UJ. Telephone: 0113 278 7111 Facsimile: 0113 275 0623 E-Mail: enviro.leeds@wyg.com				

**RENAISSANCE SOUTH YORKSHIRE**  
**FRICKLEY COLLIERY AIR RAID SHELTER**  
**ARCHAEOLOGICAL SALVAGE RECORD**

**January 2008**

**CONTENTS**

	<b><u>Page No</u></b>
<b>0.0 SUMMARY</b>	<b>- 1 -</b>
<b>1.0 INTRODUCTION</b>	<b>- 2 -</b>
<b>2.0 METHODOLOGY</b>	<b>- 3 -</b>
<b>3.0 RESULTS</b>	<b>- 3 -</b>
<b>4.0 CONCLUSION</b>	<b>- 6 -</b>
<b>5.0 BIBLIOGRAPHY</b>	<b>- 7 -</b>

**APPENDICES**

<b>Appendix A</b>	<b>-</b>	<b>Location Plans</b>
<b>Appendix B</b>	<b>-</b>	<b>Tunnel Photographs</b>
<b>Appendix C</b>	<b>-</b>	<b>Report Conditions</b>

## 0.0 **SUMMARY**

An archaeological salvage record was undertaken in June 2007 of a Second World War air raid shelter at Frickley Colliery, South Elmsall, West Yorkshire (NGR SE 4657 0994), by White Young Green Environmental. This was undertaken following, and was informed by a previous desk-based assessment of the colliery site conducted by Oxford Archaeology North in 2003 and an archaeological scoping report conducted by White Young Green Environmental in 2006. It was also informed by an archaeological fabric survey conducted by Oxford Archaeology North in 2004 and a structural survey conducted by Carl Bro in 2003. The purpose of the salvage record was to conduct a detailed photographic record of the shelter to supplement the record created during the OAN fabric survey and to ascertain the presence or absence of further fixtures and fittings and graffiti, prior to the shelters destruction. Due to the unsafe nature of the tunnels only a partial visual inspection was afforded during the previous fabric survey and it was therefore recommended that a further record be made of the shelter to check for previously unrecorded features that may be present and to allow for the mapping of the ends of the tunnels in the north western part of the complex to be undertaken. It is recommended that this report be read in conjunction with both the above reports.

The site is located at the former Frickley Colliery, established in 1903 and encompasses an area of approximately 0.8km<sup>2</sup>. The colliery closed in 1993 and the upstanding remains demolished, the mine shafts capped and made safe. The World War II air raid shelter, however, survived this phase of demolition on the site.

The air raid shelter may have been built to accommodate workers employed on the surface in the event of an air attack. It was comprised of a series of connected tunnels, extending across an area measuring 77m by 44m, and was orientated approximately north west to south east. It had three main longer parallel tunnels, with thirteen shorter connecting tunnels (Fig 2 & 3 App A). The structure was of an arched-type concrete construction, using reinforced concrete with brick aggregate of varying quality, and formed around a timber frame within a slit trench.

Two pairs of doors were observed in close proximity to Entrance 1 (Plate A), with a further pair of doors observed near to Entrance 2 (Plate B). These appear to be associated with an air-lock procedure, to stop gas from the surface entering the tunnels. An in situ ladder found in one of the alcoves seems to have served as an emergency exit. Two toilet seats with the remains of buckets were observed within two alcoves suggesting the presence of two toilet areas, one located at the south west end of the structure, the other located at the south east end of the structure (Plate C). A possible conveyor pan was observed in Tunnel B, with a series of roof level hooks and a possible lamp bracket observed in Tunnels E1 and E2 (Plate D).

No documentary evidence has been found on the shelter, however, it first appears on the 1949 6" to 1 mile OS map, suggesting that it may well have been constructed at some stage during the Second World War (1939-1945). The lack of documentary evidence is not surprising given that the structure may well have been constructed when increased production was of the essence and documentation a lesser priority or subject to levels of secrecy and restricted access.

Construction workers on the site, all who had previously worked in the coal mining industry, have suggested that the structure may have not been used as an air raid shelter at all, or may have served a multi purpose function, for example for the training of Bevin Boys and possibly for the training of mine rescue teams. These theories are possibly correct for a number of reasons. For example the narrow nature of the tunnels (some with a width of approximately 0.85m), the lack of white wash and graffiti on the walls, the lack of light fittings, dead end alcoves and the presence of a possible conveyor pan at located at the base of Tunnel B.

## 1.0 INTRODUCTION

The report was commissioned by Renaissance South Yorkshire in response to a planning condition prior to landscaping and enhancement of the derelict industrial site of Frickley Colliery, South Elmsall, West Yorkshire. White Young Green Environmental were commissioned to undertake an archaeological salvage record of the structure prior to its demolition consisting of a written and photographic record. Recording of the structure took place over a three day period in June 2007. A daily site recording form was used to record any observations and photographs were taken in colour slide format, black and white format and digital format. Registers were compiled of the photographs taken and a plan of the structure annotated to show the position of the photographs taken. Due the unsafe nature of the structure the majority of the photographs taken were from present ground level, however a small number of photographs were taken from the base of the structure to illustrate the access to Entrance 1 of the structure.

*(It should be noted that due to an on-site error the photographs location is not recorded).*

A specification was prepared by West Yorkshire Archaeology Advisory Service and this was adapted by WYGE to meet the specific needs of the recording programme and to address the specific health and safety restriction surrounding the safe recording of the structure. Once this adaptation was approved the work was undertaken.

The site of the former Frickley Colliery (NGR SE 470 100) is located in the southern part of South Elmsall township, within the county of West Yorkshire. The villages of South Elmsall and South Kirby are situated to the north and north west of the site with the settlement of Frickley located to the south.

The solid geology in the area comprises of Southern Magnesium Limestone overlain by thin glacial drift to the east of the site, with Coal Measures predominating to the west. The coal measures are made up of mudstone with beds of sandstone and numerous seams of coal. The limestone deposits in the area have also been exploited for building material over a number of years resulting in a large quantity of small scale quarries throughout the region, limestone extraction is documented from South Elmsall from the 1800's. The area is generally characterised by fertile farmland and by numerous sites of former collieries.

Frickley Colliery was established by the Carlton Colliery Company in 1903 when two brick lined shafts were sunk in order to exploit the rich coal deposits of the Barnsley Seam. Coal was first extracted in 1905. The mine is recorded as having a total of 1133 workers in 1908; this had increased by 1918 to 1523 workers. Mechanical innovations in the form of conveyors were introduced in the 1930's which significantly increased productivity and by 1945 a total of 2232 workers were employed by the colliery.

The Ordnance Survey map of 1907 shows a number of buildings constructed around the heapstead area of the colliery including a wagon shop, blacksmiths, fitting shops and a powerhouse. Railway lines, representing the initial section of the Frickley Branch line and extending eastwards from the colliery also appear on the 1907 map. The 1918 Ordnance Survey 25" to 1 mile map details the continued development at the colliery site with a marked expansion in the number of railway sidings and the completion of the Frickley branch Line railway to the main Barnsley and Hull lines. Also shown on the 1918 map and situated to the north of the colliery are a short row of buildings, quite possibly a row of miner's cottages. The 1932 Ordnance Survey map shows a largely unchanged colliery; however, additions include the appearance of a large spoil heap, east of the heapstead, which was served by an aerial ropeway and additions to the railway sidings.

It is considered that during World War II an air raid shelter was built on the site; however, there is scant documentary evidence to suggest the precise date of construction nor the precise nature of this structure. The assumption has been that this structure was in all probability constructed between 1939 and 1940. It is further assumed that the structure was built as an air raid shelter for surface workers at the colliery. The structure was formed around a timber frame within a slit trench and constructed of wire enforced concrete mixed with brick aggregate. It was laid out in a system of galleries or tunnels with only two entrances and one

emergency escape tower. The tunnels were buried approximately 1m below present ground level and contained possible airlocks in the event of gas attacks. However, it is possible given the complex nature of the tunnel or gallery system of the structure that it may have been used for the training of Bevin Boys (conscripted during the Second World War and the years immediately after) or for the training of mine rescue teams, with the alcoves acting as blind alleys in an attempt to disorientate trainees. Furthermore it has been suggested that the lack of white wash on the walls, the lack of light fixtures and the narrow nature of the galleries may also be further evidence to support this suggestion.

## **2.0 METHODOLOGY**

The archaeological salvage record was conducted to supplement the fabric survey record compiled in 2004 by Oxford Archaeology North and was conducted in order to assemble a full photographic record of the structure prior to its destruction.

The work was conducted over three days on 21<sup>st</sup>, 22<sup>nd</sup> and 27<sup>th</sup> June. The roofs of the tunnels were removed in sections in a systematic fashion using a JCB mechanical excavator to allow for a general and detailed photographic record to be completed for the entire air raid shelter. Detailed photographs were taken using two 35mm cameras. One camera used to take black and white images using a silver based film and one camera used to take colour-transparencies. A digital camera was also used as a back up. The black and white record is incomplete due to the camera and lens falling off the tripod and landing at the base of the structure, thereby breaking the lens and exposing the film.

The roofs were removed under direct and continuous supervision by the archaeologist present, with care taken to ensure, as far as possible, the integrity of the structure during the recording phase. All machine works were halted as necessary to allow adequate time for the recording of the structures and objects relating to the structures.

Due to the waterlogged nature of the tunnels it was necessary to pump out the tunnels prior to work commencing on various tunnel sections. Once the roofs had been removed silt accumulations found at the base of the tunnels was removed under direct and continuous supervision of the archaeologist present. The silt was then stock piled away from the tunnel edges and checked for the presence of artefacts.

General photographs were taken to show the extent of the various tunnels and more detailed photographs were taken of a number of the alcoves, an in situ toilet seat (Plate C), the stairs leading to Entrance 1 (Plate A) and details such as the metal hooks found at roof height in Tunnels E1 and E2 (Plate D). Where possible photographs were taken perpendicular to the line of the tunnels, however in a number of cases this was not possible.

Due to health and safety concerns and with the exception of photographs taken of the stairs found at Entrance 1 and photographs of Tunnels B4 taken from the base of the structure, all photographs were taken at present ground level using an extendable tripod.

## **3.0 RESULTS**

A search for further documentary evidence regarding the construction of this structure has been conducted, however, at present no further evidence relating to the construction has thus far been found. Oxford Archaeology, noted in their Fabric Survey Report of 2004, that there is little information available relating to air raid shelters constructed prior to and during World War II. They do make mention of a similar shelter that was located approximately 2 miles to the west in South Kirby, which it is believed was constructed in 1937. They go on to state that there was relatively little bombing in the Frickley area during the war and that the nearest site to have received a direct hit was Upton approximately 2 miles north northeast of the site. They conclude that there was possibly little need for the site to be used as an air raid shelter during the war. A similar sized air raid shelter, which may have been used to accommodate colliery workers, is also known to have been located near to Denaby Main Colliery in Mexborough approximately 8.5 miles to the south.

The Tunnels were recorded retaining the numbering system devised by Oxford Archaeology North for the fabric survey of 2004. The tunnels are numbered with respect to a series of three primary tunnels (Tunnels A, B and C) orientated northwest to south east with their corresponding off shoots labelled accordingly (Fig 2).

The structure took the form of a series of interconnected tunnels, measuring 77m by 44m within an area of approximately 1400m<sup>2</sup>. It was orientated approximately north west to south east and had three main tunnels on this alignment, with shorter connecting tunnels and a rectilinear area of tunnels at the south east end. A length of approximately 310m of tunnel survived more or less in tact, with damage being greatest at the south east end of the shelter where the complex sloped down slightly and flood water had been allowed to permeate more readily. The tunnels were relatively narrow with the longer tunnels (Tunnels A, B and C) being approximately 1m in width and the shorter tunnels between 0.85m and 0.95m in width. The height of the tunnels varied from between 1.75m and 2.05m.

The structure was of an arched gallery design, constructed within slit trenches. These trenches were battered with timber frames, after which the concrete was poured to form the base, walls and arched roof. The earth excavated to create the trenches was then used to cover the roof of the structure. The initial inspection carried out by Carl Bro in 2003 revealed that at the time of construction the structure was buried approximately 1m below the made ground level. Further more it has been suggested (Johnson 2004) that this was a fairly typical design for air raid shelters at the time, which typically had a series of narrow tunnels, rather than large chambers. The reasoning behind this being that narrow tunnels gave greater strength and were cheaper and quicker to build.

The complex was initially thought to have only one entrance, at the northwest end of the structure, however, the salvage recording exposed a further entrance at the south west corner both with steps leading down to the base and a series of wooden double doors (the frames still visible) close to these sets of steps. An escape tower was also present complete with metal ladder and capped with concrete at the surface. This was located at the mid point of Tunnel E3 and towards the south eastern end of the structure. A further ladder was located in an alcove in Tunnel C and this may have served as a further escape tower, however, there was no above ground evidence to support this theory. A total of 33 alcoves were located within the tunnels, all tunnels contained at least one alcove, with Tunnel C containing 5 alcoves and Tunnel B containing 4 alcoves. Tunnels A, A2, D2, E1 and E3 contained three alcoves, with Tunnels A1 and B3 containing two. All the alcoves were of a similar design and typically had a width of 1.02m. There was no apparent pattern to their distribution, neither in terms of their location within tunnels nor as to which side of the tunnels they located. Two of the alcoves acted as toilet cubicles and contained metal buckets with the remains of wooden toilet seats on top. These were located in the alcove located on the eastern side of Tunnel D2 and the south eastern most alcove of Tunnel B. It was not possible to retrieve these as they were washed away during the severe weather on June 25<sup>th</sup> and 26<sup>th</sup>.

The layout of the shelter reveals a series of parallel tunnels (Tunnels A, B and C), with Tunnels A and B converging on the main entrance located at the north western end of the structure. In between the longer parallel tunnels (Tunnels A, B and C) were a series of smaller interconnecting tunnels (Tunnels A1, A2, B1, B2, B3 and B4). Extending south of Tunnel C were a series of three rectangular tunnel outlines (Tunnels D1, D2, E1, E2, E3, F1 and F2) which seemed to have formed the central part of the original design as the connecting tunnels from Tunnel B, were obliquely connected to this core of three outlined rectangles. The integrity of the structure in this area was compromised, probably due to its lower lying location resulting in constant water logging which may have affected the concrete structure leading to deterioration. However, during the salvage recording it was possible to follow the remains of the concrete and thereby define accurately the limits of the structure in the south east end. The salvage record also confirmed the existence of a further entrance to the structure located at the south western side of the structure and at the end of Tunnel D2.

The concrete used to build the structure has been previously described in earlier reports on the structure as being of poor quality. The quality and thickness was also variable throughout

the structure. The concrete contained a high quantity of brick and rubble aggregates (approximately 20%) and had varying amounts of steel reinforcement bars. The Carl Bro report of 2003 noted that two types of concrete had been used in the construction of the arched roof, one being of a better quality. There was no discernable reason for the difference which may have been purely down to convenience and availability of supply (Wild & Bates 2004).

Whilst the majority of the tunnels were empty or had been backfilled there were several features evident, details of these features are outlined below.

The main entrance to the structure was located at its northwest end and also at the end of Tunnel A had a series of concrete steps leading down into the structure, these steps also led directly onto an entrance lobby, approximately 2.2m<sup>2</sup> in size. There was no surviving evidence of a door located between the steps and the entrance lobby; however, the shelter may have been fitted with an iron blast proof door at the time of its construction (Wild & Bates 2004). The two tunnels leading off from the entrance lobby (Tunnel A and B) each had a wooden doorway at the entrance and a further doorway 2.75m into the Tunnel (in the case of Tunnel A) and 2.5m in the case of Tunnel B. It is thought that the voids between the two pairs of internal doors would have served as airlocks in the event of a possible gas attack. The frames of these doors were still visible attached to the sides of the structure, with shuttering to the arch crowns above. The secondary entrance to the shelter, located at the south western end of the shelter and leading into Tunnel D2 was less elaborate and did not have an entrance lobby. Remains of a pair of wooden doors were, however, observed close to the entrance way. The first doorway in this case being approximately 2m from the steps with the further doorways another 1.5m into the tunnel. Again it is thought that these doors acted as airlocks.

The escape hatch located on the western side of Tunnel E3 had similar dimensions as all the other alcoves within the structure; however it contained a badly damaged in situ ladder attached to the base of the structure. A further ladder was located within an alcove in Tunnel C and may have acted as a secondary escape hatch. These alcoves presumably had manhole covers at the time of construction of which no evidence remained. According to Johnson, escape hatches were a standard feature of these types of air raid shelters, to provide alternative exit points should the entrances become blocked with rubble. These were typically located some distance from the entrances in the hope that in the event of collapse occurring near the entrance ways it would not also have an effect and therefore not block the escape hatch as well. The other alcoves in the main were void of any fixtures and fittings save for two alcoves containing the remains of toilets. These were located in the north eastern most alcove in Tunnel A and the alcove on the eastern side of Tunnel D2. These toilets comprised of a metal bucket over which was placed a wooden seat and acted as an improvised Elsan toilet. Aside from these four alcoves no other alcoves contained any fixtures and fittings and their use, other than as passing places, can only be speculated at.

A number of fittings were found towards the roof in Tunnels D1, E2 and F2. These comprised a number of small metal hooks probably employed to carry festoon lighting near the tops of the tunnel walls (Plate D). It is thought that the tunnels would have had a row of electric lights down one side supported on metal hooks, hammered into wooden dowels and inserted into holes drilled into the concrete walls, however, this is purely conjecture for the majority of the shelter and no evidence was apparent from the majority of the structures tunnels.

Tunnel B also contained the remains of three round iron bars that were set into either side of the chamber and located just below the roof. The bars were not evenly spaced and did not appear to have been set level across the tunnel. Their function is not known, though it has been speculated that they may have been used to reinforce the sides of the chamber, however, they may have been used in conjunction with the possible conveyor pan located directly below them at the base of the chamber. This possible conveyor pan was covered, probably at a later date, by a rubber matting. The metal structure comprised of two long rails, approximately 1.5m in length, with a rounded hook-rail on the outer side. The rails appear to have been joined by three cross braces. Further rails were observed on the chambers floor and were probably fitted inside the larger rails. The banks man present during the Salvage Recording exercise suggested, based on his working knowledge of the coal mining industry,



that these may have been the remains of conveyor pans used in the mines to aid the removal of coal from coalfaces.

No evidence of graffiti was noted from any of the chambers suggesting that the structure had never been pressed into active service as a shelter.

#### 4.0 **CONCLUSION**

Generally speaking the structural integrity of the shelter was well preserved with the exception of the south eastern corner, where water damage had permeated the concrete and caused some weakening of the structure. The salvage recording exercise allowed for the definition of the true extent of the structure and to establish the evidence of an additional entrance way to the structure located in the south western corner. The structure covered an area approximately 77m by 44m with approximately 310m of tunnels. The salvage recording also confirmed that the structure had two entrances, airlocks, one or two escape hatches and thirty three small alcoves, two of which contained chemical toilets.

The structure was of an arched-type concrete construction, formed around a timber frame within a slit trench. Documentary evidence would suggest this was one of the two standard methods of construction during the years immediately preceding and during the early years of the Second World War. The second type of construction being a square design using prefabricated concrete panels capped by a flat roof (such as the Jewry Street shelters in Winchester and the shelter at Shooters Hill in London). It has been noted that laying out shelter tunnels into galleries was a common practise, with numerous examples of this type of construction from around the country, including shelters at Mexborough and Winchester to name but two. One of the largest examples of this type of construction comes from the Vickers-Armstrong shelter at Brooklands, Surrey. This shelter comprised of 17 parallel tunnels each with a length of 180 ft and linked by three cross tunnels. It was thought that by laying out a number of galleries it would reduce damage should a direct hit occur. However, the tunnel arrangement at Frickley appears to be quite unorthodox and the reasoning behind this unclear. In particular it is unclear as to why the southern end of the structure is rectangular while the northern section has a herring bone layout. It may be down to two phases of construction, which would go part way to explain an entrance to the rectangular southern end and a further entrance into the herring boned northern section.

Its unusual layout may give credence to the suggestion that the structure served more than one function and was used both as an air raid shelter for surface workers at the colliery and also for the training of recruits drafted into the mines by Earnest Bevin, with the unusual layout acting as an exercise in overcoming disorientation. It has been indicated by Nick Catford of *Subterranea Britannica* " that many large factories had extensive networks of air raid shelters but normally the tunnels would be in a uniform grid and not in a random pattern as at Frickley Colliery (*pers comm*). Another observation is that the width of the shelter between, at between 0.85m and 1m would impede easy access and exit. The majority of recorded air raid shelters have a width of over 2m (allowing for fixtures and fittings such as bunks and benches), however, narrower air raid shelters, whilst not common, are not unheard of. A further observation made by a member of *Subterranea Britannica* is that every example they have previously seen are simple and rectilinear in shape to allow for speedy and easy access to the furthest part of the shelter from the entrance.

The report compiled by Carl Bro claimed that the shelter may have been capable of accommodating up to 2000 people, however, this may have been based on the claim that a large chamber existed connected to the tunnels. The OAN report states that the shelter may have been able to accommodate upwards of 500 people, both claims seem exaggerated given the narrow nature of the tunnels and a lack of chambers, however, 500 people is a more realistic figure.

The quality of the concrete is thought to be generally quite poor, with the construction technique employed in the building of the structure fairly rudimentary. The concrete was shown to contain large quantities of brick and pebble aggregates making it quite weak in places (though on the flip side it was incredibly strong in places). After the tunnel roofs were

removed it was clear that in the main the tunnel sides were uneven, suggesting that the shuttering boards were not often aligned properly during the construction of the shelter.

Based on available evidence it is thought that the structure was quite possibly built as an air raid shelter, with the most likely date of construction being either in the years immediately preceding the Second World War or between 1939 – 1940.

The shelter was very basic in its construction having no evidence (or space) for fixtures and fittings such as benches or bunks and was probably constructed to accommodate surface staff at the colliery in the event of an air attack. The lack of graffiti and the lack of artefacts dated to the period would suggest the shelter was never used in this capacity. This also lends weight to the theory that the structure may have had a dual purpose in that it may have acted both as a shelter and as a training ground for either Bevan Boys or men involved in mines rescue. There are a number of reasons for this conclusion, the lack of space within the shelter, the lack of fixtures such as hooks for lighting (only evident in the south western end of the shelter, the number of alcoves which may have acted as passing spaces or “blinds”, the remains of a possible conveyor pan found at the base of Tunnel B and the lack of white wash on the walls. Bevan Boys were known to have worked at the colliery and there is evidence of training grounds and structures located at other collieries who also had men conscripted into the mines during and the years immediately after the Second World War.

## **5.0 BIBLIOGRAPHY**

Bates, A & Wild, C: Frickley Colliery Air raid Shelter, South Elmsall, West Yorkshire; Archaeological fabric Survey Draft report: Oxford Archaeology North (2004)

Carl Bro; Frickley Colliery: Investigation into the Condition of Air Raid Tunnels: unpublished report (2003)

Catford, N; Subterranea Britannica, [www.subbrit.org.uk/sb-sites](http://www.subbrit.org.uk/sb-sites)

Dawson, J; Frickley Colliery, South Elmsall, West Yorkshire, Archaeological Desk-Based Assessment: Oxford Archaeology North (2003)

Johnson, S; Plymouth's World War II Underground Air Raid Shelters, [www.cyber-heritage.co.uk](http://www.cyber-heritage.co.uk)

Lowry, B & Taylor, C: British Home Defences 1940-45: Osprey (2004)

**APPENDIX A**

**Location Plans**

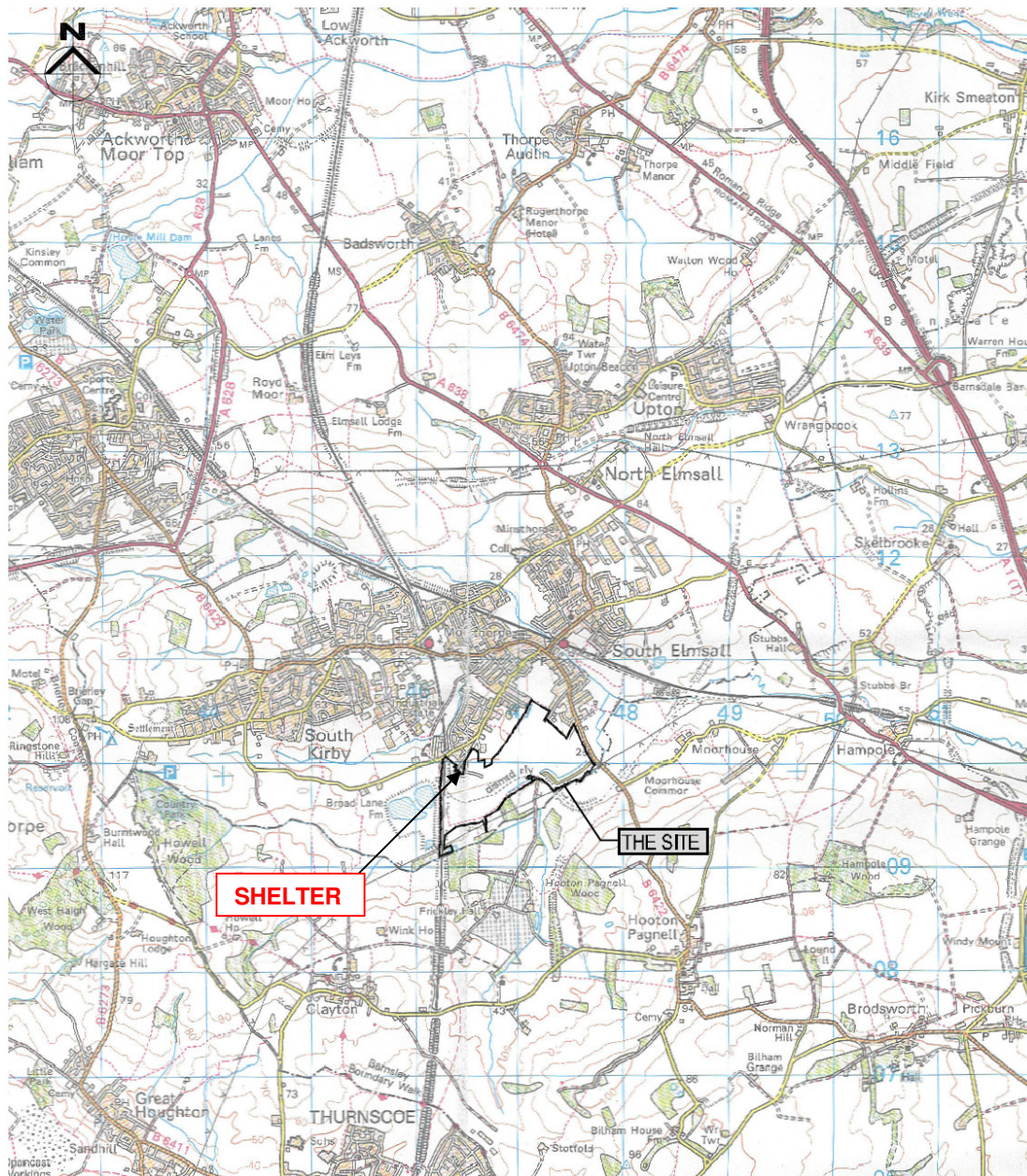


Fig.1 Location Plan: Frickley Colliery, South Elmsall, West Yorkshire (NGR SE 4657 0994)

Fig.1 Tunnel Locations

**Tunnel A**

Orientation : north-west/south-east  
 Dimensions: Length 48.6m Height 2.0m  
 Number of alcoves: 3

**Tunnel A1**

Orientation : north-east/south-west  
 Dimensions: Length 8.7m Height 2.14m  
 Number of alcoves: 1

**Tunnel A2**

Orientation : north- northwest/south-southeast  
 Dimensions: Length 10.6m Height 1.93m  
 Number of alcoves: 1

**Tunnel B**

Orientation : north-west/south-east  
 Dimensions: Length 74m Height 1.97m  
 Number of alcoves: 5

**Tunnel B1**

Orientation : north-east/south-west  
 Dimensions: Length 8.5m Height 1.9m  
 Number of alcoves: 1

**Tunnel B2**

Orientation : north-east/south-west  
 Dimensions: Length 9.0m Height 1.57m  
 Number of alcoves: 1

**Tunnel B3**

Orientation : north-east/south-west  
 Dimensions: Length 27.0m Height 1.6m  
 Number of alcoves: 2

**Tunnel B4**

Orientation : north/south Dimensions: Length 7.7m Height 1.96m  
 Number of alcoves: 1

**Tunnel C**

Orientation : north-west/south-east  
 Dimensions: Length 36.2m Height 2.0m  
 Number of alcoves: 5

**Tunnel D1**

Orientation : north-west/south-east  
Dimensions: Length 7.7m Height 1.97m  
Number of alcoves: 1

**Tunnel D2**

Orientation : north-northeast/south-southwest  
Dimensions: Length 15.2m Height 1.94m  
Number of alcoves: 3

**Tunnel E1**

Orientation : north-northeast/south-southwest  
Dimensions: Length 18.0m Height 1.92m  
Number of alcoves: 3

**Tunnel E2**

Orientation : north-west/south-east  
Dimensions: Length 10.2m Height 1.96m  
Number of alcoves: 1

**Tunnel E3**

Orientation : north-northeast/south-southwest  
Dimensions: Length 18.7m Height 1.87m  
Number of alcoves: 3

**Tunnel F1**

Orientation : north-west/south-east  
Dimensions: Length 9.8m Height 1.92m  
Number of alcoves: 1

**Tunnel F2**

Orientation : north-west/south-east  
Dimensions: Length 9.7m Height 1.85m  
Number of alcoves: 1

**APPENDIX B**

**Air Raid Shelter Photographs**





**Plate A Entrance 1 with remains of door seal identified to the left.**





**Plate B Entrance 2.**



**Plate C Remains of Toilet Seat and Bucket**





**Plate D Remains of Probable Electrical Trunking Anchors.**

## **APPENDIX C**

### **Report Conditions**

# WHITE YOUNG GREEN ENVIRONMENTAL LTD

## C1 - REPORT CONDITIONS

### *Frickley Colliery, Archaeological Salvage Record*

*This report is produced solely for the benefit of RENAISSANCE SOUTH YORKSHIRE and no liability is accepted for any reliance placed on it by any other party unless specifically agreed in writing otherwise.*

*This report is prepared for the proposed uses stated in the report and should not be used in a different context without reference to WYGE. In time improved practices, fresh information or amended legislation may necessitate a re-assessment. Opinions and information provided in this report are on the basis of WYGE using due skill and care in the preparation of the report.*

*This report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times.*

*This report is limited to those aspects reported on, within the scope and limits agreed with the client under our appointment. It is necessarily restricted and no liability is accepted for any other aspect. It is based on the information sources indicated in the report. Some of the opinions are based on unconfirmed data and information and are presented as the best obtained within the scope for this report.*

*Reliance has been placed on the documents and information supplied to WYGE by others but no independent verification of these has been made and no warranty is given on them. No liability is accepted or warranty given in relation to the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report.*

*Whilst skill and care have been used, no investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather related conditions.*

*Although care is taken to select monitoring and survey periods that are typical of the environmental conditions being measured, within the overall reporting programme constraints, measured conditions may not be fully representative of the actual conditions. Any predictive or modelling work, undertaken as part of the commission will be subject to limitations including the representativeness of data used by the model and the assumptions inherent within the approach used. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions.*

*The potential influence of our assessment and report on other aspects of any development or future planning requires evaluation by other involved parties.*

*The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYGE accept no liability for issues with performance arising from such factors*

*July 2007*